

## NST3HP Natural Sciences Tripos Part III: History and Philosophy of Science

Questions released at 12 noon on Wednesday 7 March 2018 Answers to be submitted by 12 noon on Wednesday 14 March 2018

## Before you begin read these instructions carefully:

Students should answer **two** questions from the following list of thirteen questions.

The two essays should be submitted in duplicate to the Departmental Office by 12 noon on Wednesday 14 March 2018. Students are also required to upload their examinable work to the HPS Part III Coursework site on Moodle. The examiners may use this to check word count or derivative passages.

Essays should be marked 1, 2, 3, etc. according to the number of the question attempted. The essays should be typed on only **one** side of the paper and each essay should be firmly stapled.

Hand in your essays with a completed submission form (downloadable from Moodle) listing the number of each question attempted.

## **NST Part III History and Philosophy of Science** Set essays

Answer any two questions. Answers should not exceed 2,500 words each.

- 1. How, if at all, can case studies from history of science be used to support philosophical claims about science?
- 2. How does the history of global health relate to the global history of science?
- 3. Do causes precede effects in time by conceptual necessity?
- 4. How has it shaped science that certain images have been reproduced again and again?
- 5. Should science museums display damaged instruments?
- Should science be "value-free"?
- 7. Looking back from the year 2073 in their history from the future, Oreskes and Conway write that "Western civilization became trapped in the grip of two inhibiting ideologies: namely, positivism and market fundamentalism."

  Do you think the history of climate change to date supports their statement?
- 8. Randomised trials are often said to be the gold standard for clinical research. On the other hand, critics claim that randomised trials are prone to many biases. Who is right?
- 9. What are the best sources for writing the history of early modern medical encounters?
- 10. To what extent do models of "circulation" downplay the significance of power relations in the history of science?
- 11. How has the purpose and function of scientific instruments changed in history?
- 12. Which conditions, if any, must be met in order for something to qualify as a scientific representation?
- 13. Assess the importance of Cold War military interests for determining the direction of American physics research.

## **END OF PAPER**